

According to one embodiment, an integrated circuit (100) includes a programmable portion (102) and a communication portion (104). A programmable portion (102) may include logic circuits that are configurable by a user. A communication portion (104) may include one or more circuit blocks designed to perform predetermined serial data communication functions. According to one embodiment, a communication portion (104) may include a block converter (218) that can encode/decode input data words into output data words, and a scrambler circuit (220) for scrambling/de-scrambling data according to a predetermined scrambling polynomial value. Different scrambling polynomial values may be selected from an operation control store (206) to provide a variety of different scrambling/de-scrambling functions. The inclusion of a communication portion (104) may reduce the size and/or increase the speed of an integrated circuit over conventional approaches that may synthesize serial data communication functions from programmable logic circuits.